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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,469	11/21/2003	Hoseong Ha	Q76058	8122
23373 7590 06/08/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER SHAPIRO, LEONID	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 06/08/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/717,469

Applicant(s)

HA ET AL.

Examiner

Leonid Shapiro

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-33, 36-49 is/are rejected.
- 7) ☒ Claim(s) 8, 34 and 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-7,22-23,26-33,49 are rejected under 35 U.S.C. 102(b) as being anticipated by Kazuto (JP 08-032461 A).

As to claim 1, Kazuto teaches an extensible type universal remote control (paragraph 0001) comprising:

a basic unit (drawing 1, item 1, paragraph 0014), said basic unit comprising:

a key input section comprising common input selection buttons commonly used for controlling multiple pieces of electronic equipment (drawings 1-2, item 1, paragraphs 0014-0015);

a remote-control signal transmitting section for transmitting a relevant equipment key code to a relevant piece of electronic equipment, said relevant key code generated according to a selected value of one of said common input selection buttons or a selected value of a specific input selection button arranged outside of said basic unit (drawings 1-2, items 1-6, paragraphs 0016-0017); and

an extension connection terminal portion comprising a data line (in the reference is equivalent to the connection from the second key input section 2 to control section 7) (drawing 1, items 2,7, paragraphs 0014) for receiving the relevant key code when

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generated by said specific input selection button arranged outside of said basic unit (drawings 1-4, paragraphs 0014-0019).

As to claim 2,27 Kazuto teaches an additional unit (drawing 1, item 2), said additional unit comprising:

a key input section comprising the specific input selection button, which is exclusively used for controlling specific pieces of electronic equipment (paragraph 0017); and

an extension connection terminal portion detachably connected to the extension connection terminal portion of the basic unit (drawings 1-2, items 1-2) and comprising data lines for transmitting the relevant key code, generated according to the selected value of the specific input selection buttons of the additional unit, to the basic unit (drawings 3-4, paragraphs 0013).

As to claims 3,28-29 Kazuto teaches each of the extension connection terminal portions of the basic and additional units comprises a data connector formed with the data lines and a power connector formed with power lines (paragraphs 0007, 0009).

As to claims 4-7,30-33 Kazuto teaches a memory section in which information on the relevant equipment key codes of the input selection buttons of the basic and additional units is stored (drawing 1, item 3, paragraph 0014);

a remote-control control section for extracting the relevant equipment key code from the memory section according to the selected value of the input selection button

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selected from the key input section of the basic unit and transmitting the extracted key code to the remote-control signal transmitting section (drawing 1, items 1-6, paragraph 0014);

a comparison/determination section for comparing the relevant equipment key codes stored in the memory section with the key code input from the additional unit and determining the relevant equipment key code (drawing 1, item 5, paragraph 0014); and

a mode setting section for automatically changing an equipment mode of the basic unit to an equipment mode corresponding to the additional unit in accordance with the determination result of the comparison/determination section (drawings 1-2, item 1-6, paragraphs 0013-0019).

As to claims 22,49 Kazuto teaches a power button and a channel button (paragraph 0016).

As to claim 23, Kazuto teaches a method of operating an extensible type universal remote control (paragraph 0001) comprising a

basic unit and an additional unit (drawing 1, items 1-2), comprising the steps of:

connecting the additional unit to the basic unit (drawing 2);

selecting a specific input selection button disposed on the additional unit; and

transmitting information on a relevant key code, which is generated according to a selected value of the selected specific input selection button, to a relevant piece of equipment through a remote-control signal transmitting section of the basic unit

(drawings 1-2, items 1-6, paragraphs 0016-0019).

As to claim 26, Kazuto teaches an extensible type universal remote control (paragraph 0001) comprising an additional unit (drawing 1, item 2, paragraph 0014), said additional unit comprising:

a key input section comprising common input selection buttons commonly used for controlling multiple pieces of electronic equipment (drawings 1-2, item 2, paragraphs 0014-0015);

extension connection terminal means for transmitting a relevant key code according to a selected value of one of said common input selection buttons or a selected value of a specific input selection button arranged outside of said basic unit (drawings 1-2, items 1-6, paragraphs 0016-0017); and

wherein said extension connection terminal means is detachably connected to said extension connection terminal means of said basic unit (drawings 3-4, paragraphs 0018-0019).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazuto.

Kazuto teaches a method of operating an extensible type universal remote control (paragraph 0001) comprising a basic unit and an additional unit (drawing 1, items 1-2), comprising the steps of:

connecting or detecting if the additional unit is connected to the basic unit (drawing 2) and selecting a specific button among input selection buttons of the additional unit by a user (paragraph 0017);

transmitting an arbitrary key code from the additional unit to a comparison/determination section of the basic unit (drawings 1-2, items 1-6, paragraphs 0017);

automatically changing an equipment mode of the basic unit to an equipment mode corresponding to the arbitrary key code in accordance with the determination result of the comparison/determination section (drawings 1-2, items 1-6, paragraphs 0014-0019).

Kazuto teaches the key distinction section (drawing 1, item 5 paragraph 0014) and process of the brightness adjustment (paragraph 0017).

Kazuto does not disclose comparing information on the arbitrary key code transmitted from the additional unit with information on respective equipment key codes stored in a memory section of the basic unit and determining the arbitrary key code by the comparison/determination section.

It would have been obvious to one ordinary skill in the art at the time of the invention comparing information on the arbitrary key code transmitted from the additional unit with information on respective equipment key codes stored in a memory

section of the basic unit and determining the arbitrary key code by the comparison/determination section in order to operate the extended key unit (paragraph 0001).

3. Claims 9-21,36-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazuto as applied to claims 1-2,4,7,26,29,33 above, and further in view of Kobayashi (US 6,738,047 B2).

As to claims 9-12,36-39 Kazuto does not disclose upgrade terminal is provided on a side of the basic unit so that data downloaded through the upgrade terminal can be transmitted to a memory section of the basic unit, thereby upgrading information in the memory section of the basic unit.

Kobayashi teaches upgrade terminal is provided on a side of the basic unit (fig.1, items 1-2) so that data downloaded through the upgrade terminal can be transmitted to a memory section of the basic unit, thereby upgrading information in the memory section of the basic unit (fig.5, items 5,8) col. 5, lines 61-66).

It would have been obvious to one ordinary skill in the art at the time of the invention to incorporate teachings of Kobayashi into Kazuto system in order to enable prompt and easy operation (col. 2, lines 12-14 in Kobayashi reference).

As to claims 13-16,40-43 Kobayashi teaches upgrade terminal is an external equipment connection terminal to be connected to external equipment so that the data can be downloaded therethrough (fig.1, items 1-2, col. 9, lines 21-27).



As to claims 17-20,44-47 Kobayashi teaches upgrade terminal is a storage medium mounting terminal for allowing the data to be downloaded from a storage medium mounted thereon. (fig.1, items 1-2).

As to claims 21,48 Kobayashi teaches basic unit further comprising an LCD window, for displaying status information, arranged at an upper portion of a front face thereof (fig.1, item 1c, col. 4, lines 29-36).

#### ***Allowable Subject Matter***

4. Claim 8,34-35 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The major difference between the teaching of the prior art of record (Kazuto, Kobayashi) and the instant invention is that a plurality of additional units, and each of the additional units has an extension connection terminal receiving portion formed with data lines for receiving relevant key codes input from the other additional units, and the other additional units are consecutively connected in series or parallel to the additional unit connected to the basic unit.

#### ***Response to Arguments***

5. Applicant's arguments filed 03/07/07 have been fully considered but they are not persuasive:

On page 4, 1<sup>st</sup> paragraph of Remarks, Applicant's stated that Kazuto fails to teach or suggest transmitting a relevant equipment key code to a relevant piece of electronic equipment, said relevant key code generated according to a selected value of one of said common input selection buttons or a selected value of a specific input selection button arranged outside of said basic unit, as recited in claim 1. Rather, the remote control transmitter in Kazuto is programmed to be directed toward a single device, and therefore does not need to generate and send a relevant equipment key code to a relevant piece of electronic equipment. Further, Kazuto fails to teach or suggest that values of one of said common input selection buttons generate the relevant key code. Rather, Kazuto teaches that a memory stores the function for each button of the remote control transmitter for the particular device that the remote control transmitter is directed toward. However, Kazuto not programmed to be directed toward a single device since Kazuto teaches that a memory stores the function for each button of the remote control transmitter for the particular device that the remote control transmitter is directed toward. As one of ordinary skill in the art will recognize the memory storage for the function for each button of the remote control will allow to generate the relevant key code.

On page 4, 2<sup>nd</sup> paragraph of Remarks, Applicant's stated that Kazuto fails to teach or suggest "an extension connection terminal portion comprising a data line for receiving the relevant key code when generated ... outside of said basic unit" as recited in claim 1. When the second key input section taught by Kazuto is attached to the first key input section, the memory contained in the first key input section contains the codes

corresponding to the keys on the second key input section. Thus, the first key input section transmits the key code to the second key input section, not receives the relevant key code, as recited in claim 1. However, in the reference data line is equivalent to the connection from the second key input section 2 to control section 7 (drawing 1, items 2,7, paragraphs 0014) and first and second key sections transmit key code to the control section, and control section receives those codes, contrary to the statement of the Applicant's.

The same arguments will apply to claims 23,26.

On page 5, last paragraph of Remarks, Applicant's stated that the second key input section in Kazuto does not transmit an arbitrary key code to a comparison/determination section of the first key input section, as recited in claims 24 and 25. However, Drawing 1 clearly teaches first and second key sections transmit key code to the control section, and control section receives those codes (drawing 1, items 2,7, paragraphs 0014), contrary to the statement of the Applicant's.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Telephone Inquire***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS

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A handwritten signature in black ink, appearing to read 'R. Hjerpe', is positioned above the printed name.

RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600